IN THE CLAIMS:

Please amend claims 1, 3-5, 15, 17-19, 21-26, and 28-42 as follows.

1. (Currently Amended)   A method, ~~of optimizing an establishment of a communication connection, the method~~ comprising:

starting an application level communication connection setup procedure between a mobile node and a correspondent node via a communication subsystem infrastructure of a packet based communication network by transmitting and receiving application level signaling messages between the correspondent node and the mobile node;

transmitting, during the application level communication connection setup procedure, a trigger signal from an application layer to a network layer in the mobile node wherein the trigger signal comprises the address of the correspondent node; and

performing, in response to the trigger signal, a network level route optimization procedure during the application level communication connection setup procedure.

2. (Original) The method according to claim 1, wherein the packet based communication network comprises wireless communication network parts.

3. (Currently Amended)   The method according to claim 1, wherein the network level is based on an internet protocol ~~(IP)~~ based transport protocol.

Application No.: 10/720,105

4. (Currently Amended)   The method according to claim 3, wherein the address of the correspondent node is an ~~IP~~ internet protocol address.

5. (Currently Amended)   The method according to claim 3, wherein the IP based transport protocol uses ~~Mobile IPv6~~mobile internet protocol version 6.

6. (Previously Presented)   The method according to claim 5, wherein the communication subsystem infrastructure further includes a home agent.

7. (Original) The method according to claim 1, wherein the application level communication connection setup procedure is executed by using the session initiation protocol wherein the address of the correspondent node is provided to the mobile node in a session description protocol descriptor.

8. (Original) The method according to claim 1, wherein the network level route optimization procedure comprises a binding update procedure in which the care-of-address of the mobile node is transmitted to the correspondent node.

9. (Previously Presented)   The method according to claim 1, wherein performing the network level route optimization procedure comprises initializing a network level route optimization on the mobile node side.

Application No.: 10/720,105

10. (Previously Presented) The method according to claim 9, wherein performing the network level route optimization procedure comprises initializing a network level route optimization on the correspondent node side when an network level route optimization signaling from the mobile node is received.

11. (Previously Presented) The method according to claim 1, wherein performing the network level route optimization procedure is completed before the application level communication connection setup procedure is completed.

12. (Previously Presented) The method according to claim 1, wherein transmitting the trigger signal is performed via an interface provided between the application layer and a network level module in the network layer of the mobile node.

13. (Original) The method according to claim 12, wherein the interface is implemented by an application programming interface.

14. (Previously Presented) The method according to claim 12, further comprising transmitting an acknowledgment from the network level module to the application layer after the trigger signal comprising the address of the correspondent node is received.

Application No.: 10/720,105

15. (Currently Amended) A system, ~~for optimizing an establishment of a communication connection, wherein the system is configured to~~comprising:

a connector configured to perform an application level communication connection setup procedure between a mobile node and a correspondent node via the communication subsystem infrastructure of a packet based communication network by transmitting and receiving application level signaling messages between the correspondent node and the mobile node;

a transmitter configured to produce and transmit, during the application level communication connection setup procedure, a trigger signal from an application layer to a network layer in the mobile node wherein the trigger signal comprises the address of the correspondent node; and

an optimizer configured to perform, in response to the trigger signal, an network level route optimization procedure during the application level communication connection setup procedure.

16. (Previously Presented) The system according to claim 15, wherein the packet based communication network comprises wireless communication network parts.

17. (Currently Amended) The system according to claim 15, wherein the network level is based on an internet protocol ~~(IP)~~ internet protocol based transport protocol.

Application No.: 10/720,105

18. (Currently Amended)   The system according to claim 17, wherein the address of the correspondent node is an ~~IP~~ internet protocol address.

19. (Currently Amended)   The system according to claim 17, wherein the IP based transport protocol uses ~~Mobile IPv6~~ mobile internet protocol version 6.

20. (Previously Presented) The system according to claim 19, wherein the communication subsystem infrastructure further includes a home agent.

21. (Currently Amended)   The system according to claim 15, wherein the ~~system~~ connector is further configured to perform the application level communication connection setup procedure and to use the session initiation protocol wherein the address of the correspondent node is provided to the mobile node in a session description protocol descriptor.

22. (Currently Amended)   The system according to claim 15, wherein the ~~system~~ optimizer is further configured to perform the network level route optimization procedure and to execute a binding update procedure in which the care-of-address of the mobile node is transmitted to the correspondent node.

Application No.: 10/720,105

23. (Currently Amended)   The system according to claim 15, wherein the ~~system~~ optimizer is further configured to perform the network level route optimization procedure and to initialize an network level route optimization on the mobile node side.

24. (Currently Amended)   The system according to claim 23, wherein the ~~system~~ optimizer is further configured to perform the network level route optimization procedure and to initialize an network level route optimization on the correspondent node side when an network level route optimization signaling from the mobile node is received.

25. (Currently Amended)   The system according to claim 15, wherein the ~~system~~ optimizer is further configured to perform the network level route optimization procedure and to complete the network level route optimization procedure before the application level communication connection setup procedure is completed.

26. (Currently Amended)   The system according to claim 15, wherein the ~~system~~ transmitter is configured to transmit and produce the trigger signal and comprises an interface provided between the application layer and a network level module in the network layer of the mobile node.

27. (Original) The system according to claim 26, wherein the interface is implemented by an application programming interface.

Application No.: 10/720,105

28. (Currently Amended) The system according to claim 26, ~~further system~~wherein the transmitter is further configured to produce and transmit an acknowledgment from the network level module to the application layer after the trigger signal comprising the address of the correspondent node is received.

29. (Currently Amended) An ~~network node~~apparatus, ~~wherein the network is configured to~~comprising:

a connector configured to perform an application level communication connection setup procedure between the network node and a correspondent node via a communication subsystem infrastructure of a packet based communication network and to transmit and receive application level signaling messages between the correspondent node and the network node;

a transmitter configured to produce and transmit, during the application level communication connection setup procedure, a trigger signal from an application layer to a network layer in the network node wherein the trigger signal comprises the address of the correspondent node; and

an optimizer configured to perform, in response to the trigger signal, a network level route optimization procedure during the application level communication connection setup procedure.

Application No.: 10/720,105

30. (Currently Amended) The ~~network node~~apparatus according to claim 29, wherein the packet based communication network comprises wireless communication network parts.

31. (Currently Amended) The ~~network node~~apparatus according to claim 29, wherein the network level is based on an internet protocol ~~(IP)~~based transport protocol.

32. (Currently Amended) The ~~network node~~apparatus according to claim 31, wherein the address of the correspondent node is an ~~IP~~internet protocol address.

33. (Currently Amended) The ~~network node~~apparatus according to claim 31, wherein the ~~IP~~internet protocol based transport protocol uses ~~Mobile IPv6~~mobile internet protocol version 6.

34. (Currently Amended) The ~~network node~~apparatus according to claim 33, communication subsystem infrastructure further includes a home agent.

35. (Currently Amended) The ~~network node~~apparatus according to claim 29, wherein the ~~network node~~apparatus is configured to perform the application level communication connection setup procedure and to use the session initiation protocol

Application No.: 10/720,105

wherein address of the correspondent node is provided in a session description protocol descriptor.

36. (Currently Amended) The ~~network node~~apparatus according to claim 29, wherein the ~~network node~~ optimizer is configured to perform the network level route optimization procedure and to execute a binding update procedure in which the care-of-address of the network node is transmitted to the correspondent node.

37. (Currently Amended) The ~~network node~~apparatus according to claim 29, wherein the ~~network node~~optimizer is configured to perform the network level route optimization procedure and to initialize a network level route optimization on the network node side.

38. (Currently Amended)The ~~network node~~apparatus according to claim 29, wherein the optimizer is further configured to complete the network level route optimization procedure ~~is completed~~ before the application level communication connection setup procedure is completed.

39. (Currently Amended) The ~~network node~~apparatus according to claim 29, wherein the ~~network node~~apparatus further comprises a transmitter ~~is~~ configured to transmit and produce the trigger signal and ~~further comprise~~

Application No.: 10/720,105

an interface, wherein the interface is provided between the application layer and network level module in the network layer of the network node.

40. (Currently Amended) The ~~network node~~apparatus according to claim 39, wherein the interface is implemented by an application programming interface.

41. (Currently Amended) The ~~network node~~apparatus according to claim 39, wherein the ~~network node~~apparatus further comprises a transmitter ~~is further~~ configured to produce and transmit an acknowledgment from the network level module to the application layer after the trigger signal, comprising the address of the correspondent node is received.

42. (Currently Amended) An apparatus, ~~usable in a packet based communication network,~~ comprising:

means for performing an application level communication connection setup procedure between a network node and a correspondent node via a communication subsystem infrastructure of the packet based communication network by transmitting and receiving application level signaling messages between the correspondent node and the network node;

means for producing and transmitting, during the application level communication connection setup procedure, a trigger signal from an application layer to a network layer

Application No.: 10/720,105

in the network node wherein the trigger signal comprises the address of the correspondent node; and

means for performing, in response to the trigger signal, a network level route optimization procedure during the application level communication connection setup procedure.

Application No.: 10/720,105